

Note on *Paratelphusa maculata* de Man

By M. W. F. TWEEDIE, M.A.

Systematic.—*Paratelphusa incerta* (Lanchester) = *P. maculata* de Man.

The common low-level Potamonid crab of Singapore and the southern half of the Malay Peninsula was described by Lanchester (1900, p. 749) as a new variety, *incerta*, of *Paratelphusa tridentata* Milne-Edwards. Shortly afterwards it was recognised that its affinities are rather with the Sumatran *P. maculata* de Man (de Man, 1879, p. 64; 1892, p. 302), and Nobili (1901, p. 8) suggested that it should be regarded as a variety of that species. Rathbun in 1905 (1905, p. 238) treated it as a separate species, *Potamon (Paratelphusa) incertus*, and Kemp (1918, p. 247) also takes this view, giving a list of distinguishing characters, based on a single large specimen of "*incerta*" from Singapore and a series of *maculata* from Deli, Sumatra.

In October 1936 I was enabled, by courtesy of the Director of the Leiden Museum, to compare specimens identical with *incerta* from Singapore and the Malay Peninsula with the types of *maculata* from the Sillago river in Sumatra. I could find no characters to distinguish Malayan and Sumatran specimens of about the same size, and I am convinced that they are conspecific.

As I mentioned above, Kemp (1918, p. 247) compared a single very large male from Singapore with a series from Sumatra and enumerated characters to separate them under four headings. Examination of a series of specimens of different sizes from Singapore and Johore shows that all these characters are inconstant in the Malayan form, their condition depending partly on variability and partly on the size of the individual.

The first character, that of the relation between the greatest breadth of the carapace and the distance from the edge of the

front to the cervical suture varies according to the size of the individual, as the following table will show:

Locality	Sex	a	b	a/b
Singapore ..	?	57	25.5	2.25
"	♂	46.5	22.5	2.07
"	♀	46	23	2.0
"	♀	41	21	1.95
Johore ..	♂	37	19.5	1.90
"	♀	34.5	18	1.92
Singapore ..	♀	33.5	17	1.97
Johore ..	♀	33.5	17.5	1.92
"	♀	30	16	1.88
Singapore ..	♀	28.5	15.5	1.84
"	♀	25	13.5	1.85
"	♂	22.5	12.5	1.80
Johore ..	♀	20	11	1.81

a = greatest breadth of carapace.

b = distance from edge of front to cervical suture.

The column a/b shows that only in the very largest specimens, such as Kemp's from Singapore, is the measurement b less than half a . In specimens of 40–45 mm. in breadth, well grown adults, b may be expected to be about half a , as in the Sumatran specimens examined by Kemp. In smaller individuals the ratio a/b is less than 2, becoming progressively less in sub-adult and juvenile specimens. Kemp does not give the size of his specimens from Deli and unfortunately I did not take the measurement b when I examined the material in the Leiden Museum, but the evidence from the Malayan series is sufficient to show that this character cannot be used to separate them from the Sumatran form.

Kemp's characters (ii) and (iii), the position of an imaginary line joining the tips of the posterior epibranchial teeth, and the position of the lateral extremities of the post-orbital crests, are so variable in the Malayan form that they cannot be regarded as of diagnostic value. In any case in the majority of the Malayan specimens the lateral extremities of the post-orbital crests reach a point well in front of the middle of the foremost epibranchial tooth, the condition obtaining in Kemp's specimen being exceptional.

The same may be said for the characters listed by Kemp under (iv). The ratio of the distance between the extra-orbital angle and the first lateral tooth to that between the two lateral

NOTE ON PARATELPHUSA MACULATA

teeth varies from 1: 0.54 to 1: 0.82; in the first, admittedly a rather extreme case, the one is nearly double the other.

LITERATURE

- KEMP, S. 1918. Zoological Results of a Tour in the Far East. Pt. V: Crustacea Decapoda and Stomatopoda. (Mem. Asiat. Soc. Bengal, VI, pp. 217-297). ✓
- LANCHESTER, W. F. 1900. On a collection of Crustaceans made at Singapore and Malacca. Crustacea Brachyura (Proc. Zool. Soc. London, 1900, pp. 719-770). ✓
- DE MAN, J. G. 1879. On Some New or Imperfectly Known Podophthalmous Crustacea of the Leyden Museum. (Notes Leyden Mus., I, pp. 53-73). ✓
1892. Decapoden des Indischen Archipels. (Zool. Ergebnisse einer Reise in Niederlandisch Ost-Indien, Leiden, II, pp. 265-527).
- NOBILI, G. 1901. Note intorno ad una collezione di Crostacei di Sarawak (Borneo). (Boll. Mus. Torino, XVI, No. 397, pp. 1-14).
- RATHBUN, M. J. 1905. Les Crabes d'eau douce (Potamonidæ). (Arch. Mus. Paris, VI, pp. 225-312).